



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,835	01/16/2004	Chun-Chen Chen	DEE-PT147	8293
3624	7590	06/29/2005	EXAMINER	
CHUNG TRANS, XUONG MY				
ART UNIT		PAPER NUMBER		
		2833		

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

GM

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/759,835	CHEN, CHUN-CHEN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Xuong M. Chung-Trans	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 31 March 2005.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-16 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

1. This is responsive to the amendment filed on 3/31/05. Claim 1 has been amended and claims 17-19 has been canceled. Therefore, claims 1-16 are pending in this application.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, and 5-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art (specification, pages 1-2 and figs. 1-4) and in view of Rigazio (USPN 3,260,905), and Harris Jr. (3,210,720).

The admitted prior art discloses the invention substantially as claimed except for a second ring mounted on said central pillar and having a third surface and a fourth surface, wherein said second surface and said third surface are adjacent to each other and have a distance therebetween; and a conducting piece directly and electrically connected with said second ring, the central pillar through the opening, and the second end, after assembly, of the terminal to form thereby three contact areas thereamong. Rigazio, however, teaches such a terminal (18, 21) comprising a first ring (24) and the second ring (23) and the use of a conducting piece (20) directly and electrically connected with the second ring (23), the central pillar (22) through the opening, and the second end (27), after assembly, of the terminal to form thereby three contact areas thereamong (fig. 2, and col. 2, lines 44-61). Therefore, it would have

been obvious to one of ordinary skill in the art at the time the invention was made to include the teaching of Rigazio in the admitted prior art in order to provide an excellent electrical connection thereamong. Further, Harris teaches in figs. 4-5 the terminal (48) formed with a plurality of spaced ring (50) for the purpose of anchorage of the insulation molded thereon. Therefore, it would have been obvious to one skilled artisan at the time the invention was made to include the teaching of Harris in the admitted prior art in order to prevent separation of the terminal and the insulator body.

As per claims 5-7, the admitted prior art discloses the invention substantially as claimed but does not teach said first and said second rings (50) have an identical diameter and said distance between said second surface and said third surface is larger than zero, wherein a space between said first ring and said second ring of said terminal is tightly filled by said main body, and said first and said second rings are surrounded by said main body. Harris, however, discloses said first and said second rings (50) have an identical diameter and said distance between said second surface and said third surface is larger than zero, wherein a space between said first ring and said second ring of said terminal is tightly filled by said main body, and said first and said second rings are surrounded by said main body. Therefore, it would have been obvious to one skilled artisan at the time the invention was made to include the teaching of Harris in the admitted prior art in order to prevent separation of the terminal and the insulator body.

As per claims 8-13, The admitted prior art discloses the invention substantially as claimed but does not teach the distance between said second surface and said third surface is equal to zero; wherein said second ring has a relatively smaller diameter than

that of said first ring, wherein said main body and said terminal are combined together through assembling, wherein said central pillar, said first ring and said second ring of said terminal are integrally formed; wherein said terminal and said conducting piece are made of a conductive material. Rigazio, however, discloses the distance between said second surface and said third surface is equal to zero; wherein said second ring has a relatively smaller diameter than that of said first ring, wherein said main body and said terminal are combined together through assembling, wherein said central pillar, said first ring and said second ring of said terminal are integrally formed; wherein said terminal and said conducting piece are made of a conductive material. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the teaching of Rigazio in the admitted prior art in order to provide a plurality of ring with different diameter for the purpose of anchorage of the insulation body.

As per claims 14 -16, the admitted prior art discloses the invention substantially as claimed but does not teach said conducting piece is directly and tightly pressed close to said ring by riveting the second end (27) of said terminal. Rigazio, however, discloses said conducting piece is directly and tightly pressed close to said ring by riveting the second end (27) of said terminal (fig. 2, and col. 2, lines 44-61). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the teaching of Rigazio in the admitted prior art in order to provide an excellent electrical connection between the conducting piece and the ring.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art, Rigazio and Harris as applied to claim 1 above, and further in view of Schank (2,097,257).

The admitted prior art discloses the invention substantially as claimed but does not teach the main body is molded by injection. Schank, however, teaches the body is molded (col. 2, lines 7-12). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the teach of Schank in the admitted prior art so that the insulator body can be injection molded as an integral unit and thereby providing easy assembly.

5. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

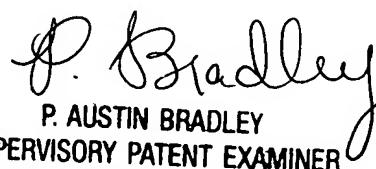
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xuong M. Chung-Trans whose telephone number is (571) 272-2002. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on (571) 272-2800 extension 33.. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
X. Chung-Trans

  
P. AUSTIN BRADLEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800